

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA,

v.

KENNETH PETTWAY, JR. and
DEMETRIUS BLACK,

Defendants.

DECISION AND ORDER
12-CR-103S (1), (2)

I. INTRODUCTION

Defendants Kenneth Pettway, Jr. and Demetrius Black are charged in a Fourth Superseding Indictment with controlled substances and firearms offenses. Presently before this Court is Defendants' Motion in Limine to Preclude DNA Evidence, or in the alternative, for a Daubert¹ hearing. (Docket No. 664.) For the following reasons, Defendants' motion is denied.

II. BACKGROUND

On August 31, 2016, this Court granted the government's motion to collect DNA buccal samples from Defendants for analysis by the Erie County Central Police Services Forensic Laboratory. (Docket No. 622.) Defendants' DNA profiles could not be excluded from either firearm tested, resulting in "matches." Defendants contend that the analysis used to reach this result is unreliable.

According to John P. Simich, Ph.D, the Director of the Erie County Forensic Laboratory, the laboratory uses a testing process known as "PCR/STR" to analyze DNA. (Affidavit of John P. Simich, Ph.D. ("Simich Aff."), Docket No. 668-1), ¶¶ 1, 9.) "PCR"

¹Daubert v. Merrel Dow Parms, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993).

stands for “polymerase chain reaction,” which describes the biotechnical process by which the DNA profiles are determined. (Simich Aff., ¶ 9.) “STR” stands for “short tandem repeats,” which describes a characteristic of the DNA itself that results in unique and measurable sequences of values at various sites along the DNA molecule. (Simich Aff., ¶ 9.) This process for analyzing DNA is used world-wide, and has been the foundation of forensic DNA testing for more than 15 years. (Simich Aff., ¶¶ 9, 10, 31.)

The testing and evaluation procedures result in a DNA profile at various genetic markers for the DNA from the unknown source in the sample tested. (Simich Aff., ¶ 11.) These results are then compared to the known DNA sample from the person of interest. (Id.) If it “matches,” the evidence DNA profile values are then compared to existing population databases to determine the frequency of these various values within relevant populations using computer software. (Id.) The result is a numeric calculation that provides the probability of randomly selecting an unrelated individual with a DNA profile matching the DNA profile from the unknown source. (Id.)

The statistical method used for these calculations by the Erie County Forensic Laboratory is probabilistic genotyping software called “STRmix.”² (Simich Aff., ¶ 13.) It has been in use since August 2012. (Simich Letter, Docket No. 668-2.) Simich exhaustively researched the accuracy and validity of the results produced through STRmix and concluded that the scientific foundations of the STRmix process are based on principles widely accepted in the scientific and forensic science communities. (Simich Aff., ¶¶ 17, 21.) Simich also conducted internal validation studies using guidelines published by the

²Before switching to STRmix, the Erie County Forensic Laboratory used other commercially available analysis kits including “Identifiler,” “Minifiler,” and the PowerPlex Fusion Kit. (Simich Aff., ¶ 8.)

Scientific Working Group on DNA Analysis Methods called *Guidelines for the Validation of Probabilistic Genotyping Systems*. (Simich Aff., ¶ 23.) From those internal studies, Simich concluded that STRmix provides consistently accurate information that is more meaningful than previous methods of analysis. (Simich Aff., ¶ 25.) Simich therefore implemented STRmix. (Simich Aff., ¶¶ 14, 32.)

III. DISCUSSION

Without providing any expert opinion or scientific evidence, Defendants maintain that the STRmix method of analysis is “relatively new” and unreliable. (Affidavit of Herbert L. Greenman, Esq. (“Greenman Aff.”), Docket No. 664, ¶¶ 15, 16.) They assert, based on counsel’s “belief,” that STRmix has “come under scrutiny” and that the methodology for the science behind it has never been provided by its creator. (Greenman Aff., ¶¶ 16, 17.)

In response, the government submits the Simich Affidavit and Letter referenced above. (Docket Nos. 668-1, 669-2.) Therein, Simich refutes Defendants’ unsubstantiated claims. He not only attests to STRmix’s reliability (see Simich Aff., ¶¶ 14, 25, 32; Simich Letter), he relays that STRmix and its underlying principles have been peer-reviewed in more than 90 articles and that STRmix “represent[s] an evolution in the process of DNA interpretation using existing accepted biological models and scientific principles rather than a completely new or novel approach to DNA analysis.” (Simich Aff., ¶ 21.) Simich also explains how the underlying principles of STRmix have been produced for critique and validation by its creator. (Simich Aff., ¶¶ 29, 30; Simich Letter.) The government further notes that STRmix evidence has been admitted in this district, New York state courts, and other jurisdictions. (Government’s Response, Docket No. 668, ¶¶ 10, 11, 12, 13.)

Defendants have not refuted or responded to anything in the Simich Affidavit or Letter.

Having considered the parties' arguments, this Court finds that neither preclusion of the STRmix evidence nor a pretrial hearing are warranted. In its "gatekeeper role," a court must make "a preliminary assessment of whether the reasoning or methodology underlying the [expert] testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." See Daubert v. Merrel Dow Parms, Inc., 509 U.S. 579, 592-93, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993).

Here, Defendants offer no specific challenge to the STRmix methodology or reliability, beyond their unsubstantiated "belief" that the method is new and unreliable. The Simich Affidavit refutes the notion that STRmix is new, and challenges to reliability and assertions of factual error in the application of a given methodology go to the weight of the evidence, not to admissibility.³ See McCulloch v. H.B. Fuller Co., 61 F.3d 1038, 1044 (2d Cir. 1995) (finding that disputes as to faults in methodology go to the weight, not the admissibility, of expert testimony); see also Perkins v. Origin Medsystems, Inc., 299 F. Supp. 2d 45, 60 (D.Conn. 2004) (finding that challenge to expert witness's opinion as not reliably based on her application of methodology went to weight, not admissibility). The government has also established that STRmix has been examined and admitted in other courts of competent jurisdiction.

Neither preclusion nor a hearing is necessary. Defendants may press their contentions concerning the longevity and reliability of STRmix on cross-examination and

³Defendants' contention that the presence of DNA from family members may also render the DNA results unreliable similarly goes to weight, not admissibility.

through their own expert witnesses. But nothing in their motion demonstrates that a Daubert hearing or preclusion of evidence is necessary or warranted, particularly in light of the Simich Affidavit and Letter, which demonstrate, for purposes of defeating Defendants' motion, that the STRmix method is scientifically valid and can be applied in this case.

IV. CONCLUSION

For the reasons stated above, Defendants' motion in limine is denied.

V. ORDER

IT HEREBY IS ORDERED, that Defendants' Motion in Limine to Preclude DNA Evidence, or in the alternative, for a Daubert hearing (Docket No. 664) is DENIED.

SO ORDERED.

Dated: October 21, 2016
Buffalo, New York

s/William M. Skretny
WILLIAM M. SKRETNY
United States District Judge